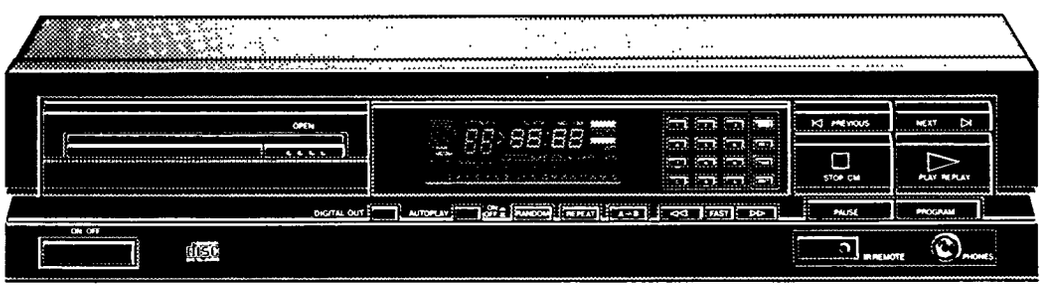
CONSUMER ELECTRONICS

PHILIPS



CD 620

GB	Compact Disc Player
F	Lecteur de Disques Compacts
D	Compact Disc-Spieler
NL	Compact Disc-Speler
E	Reproductor 'Compact Disc'
I	Lettore di Compact Disc
DK	Compact Disc-Afspiller
S	Compact Disc-Spelare
SF	Compact Disc -Soitin

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English

INTRODUCTION

The Compact Disc system is a major step forward in the sphere of audio technology. By employing the most sophisticated digital and optical technologies, Compact Disc not only produces the ultimate in sound reproduction, it also offers unprecedented ease of operation, with rapid access to every track on the disc and the possibility of programming.

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INSTALLATION

CHECKING THE POWER SUPPLY SETTING

- Check that the type plate on the rear of your player indicates the correct supply voltage.
- If your mains supply voltage is different, consult your dealer or our Service Organisation.

REMOVING THE TRANSIT CLAMPS *(Fig. 1-2)*

The two red transit clamps on the bottom lock the play mechanism to protect it during transportation.

- Turn the player upside down.
- Turn the clamps anti-clockwise and remove them from the player.
- Store them in the recesses provided.

Replace the clamps if you wish to transport the player. To do this, turn the player upside down, insert the clamps in the holes provided and rotate them clockwise until they lock in position.

INSERTING AND REPLACING THE BATTERIES IN THE REMOTE CONTROL *(Fig. 3)*

- Open the battery compartment.
- Insert the two batteries according to the diagram in the compartment.
- Replace the cover.

The life of the batteries is around one year. Remove them when they are flat or when you are not intending to use the remote control for some time.
In this way you will prevent damage to the remote control by possible battery leakage.
For replacement only use batteries of the type R03, UM4 or AAA.

SITING THE COMPACT DISC PLAYER

Free-standing

- Always position the player horizontally on a flat, firm surface.
- Allow a free space of at least 3 cm above the player so as not to interfere with the cooling of the player.

In an audio rack

- The player can be sited in any desired position.

Stacked

- Site the player preferably at the bottom or at the top.
- Never position the player directly on top of a high-power amplifier, as such an amplifier gives off a substantial amount of heat.

Note!
Never allow the player to stand for long periods in direct sunlight or near a heat source.

CONNECTIONS *(Fig. 4)*

a Connection for the mains lead.

b **OUT L R**: for the connecting cable to the amplifier.

- Insert a red plug into the 'R' socket (right-hand channel) and the other plug into the 'L' socket (left-hand channel).
- Insert the two other plugs into the corresponding sockets of the CD or AUX input of your amplifier.
  You can also use the TUNER or TAPE IN connection, but ***never*** the PHONO input. This is not suitable for Compact Disc reproduction.

c **DIG**(ITAL) **OUT**: for digital signal processing or future applications such as CD-I. This output supplies a digital signal and can therefore only be connected to an input which is suitable for this signal. Use here a lead with one cinch plug on either end.

Note!
Never connect this socket to a non-digital input of an amplifier, such as AUX, CD, TAPE, PHONO, etc. This can damage the amplifier and the loudspeakers.

d **RC5 IN/OUT**: for a remote control system.
Use this connection for:

- Connecting up the equipment when you are incorporating the player in a PHILIPS HiFi system with its own remote control system.
- Connecting the remote control receiver EM 2200, available as an accessory, if the siting of the player prevents its IR REMOTE eye from receiving the signals from the remote control directly.

OPERATION

EXPLANATION OF KEYS ETC. *(Fig. 5)*

1 ON/OFF
› For switching on and off.

2 Disc tray on which the **OPEN** key is situated; the tray closes when the front is pressed briefly.

3 DISPLAY
› Informs you about the functioning of the player.
› Displays details from the disc's track list.
See also: 'The indications on the display'.

4 C(LEAR)
› For erasing track numbers from a programme.
› For erasing favourite track selections.

5 '1-0' digit keys
› For selecting another track during play.
› For selecting a track number to start play with.
› For selecting track numbers when compiling a programme.
› For entering the recording time when making a tape recording.

6 S(TORE)
› For storing a programme in the FTS memory.
› For storing the recording time when making a tape recording.

7 FTS
› For activating the Favourite Track Selection circuit.

8 REV(IEW)
› For checking a programme.

9 TIME
› For selecting the time information you want to see:
– **TOTAL TIME**: the total playing time of a disc or programme.
– **TOTAL REM TIME**: the remaining playing time of a disc or a programme.
– **TRACK TIME**: the elapsed playing time of the track being played.
– **REM TRACK TIME**: the remaining playing time of the track being played.

10 EDIT
› For selecting EDIT mode to enter the recording time when making a tape recording.

11 STOP/CM
› For stopping play (STOP).
› For erasing a programme (CM = Clear Memory).

12 PREVIOUS and **NEXT**
› For selecting another track during play.
› For selecting a track number to start play.
› For selecting track numbers when compiling a programme.
(PREVIOUS from high to low and NEXT from low to high.)

13 PLAY/REPLAY
› For starting play (PLAY).
› For returning to the beginning of a track (REPLAY).

14 DIGITAL OUT
› For switching the DIGITAL OUT output on and off.
Only use this key if you connect the player to other digital equipment via the DIGITAL OUT output.

15 AUTOPLAY
› For switching the automatic play function on and off. When the key is pressed, play starts automatically 10 seconds after the player has been switched on.

16 RANDOM
› For playing in random order.

17 REPEAT
› For repeating a disc or a programme.

18 'A-B'
› For setting the starting and stopping point of a passage to be repeated.

19 '⏮ ⏭'
› For fast search to a particular passage during play ('⏮' backwards and '⏭' forwards).
When used in conjunction with **FAST**, the search speed is increased.

20 PAUSE
› For interrupting play.
› For holding play at the start of a disc, track or passage.

21 IR REMOTE
› Receives the signals from the remote control.

22 PHONES
› For connection of headphones.
See also: 'Listening with headphones'.

23 PROG(RAM)**/PLAY**
› For direct programming (PROGRAM) or immediate selection and playback (PLAY) of track numbers.

REMOTE CONTROL
The following keys have a different label on the remote control:
– PROG(RAM) PLAY = DIRECT PR(OGRAM)/PLAY
– STOP/CM = STOP
– PLAY/REPLAY = PLAY
– PREVIOUS = ◁ TRACK
– NEXT = TRACK ▷
– ⏮ = ◁ SEARCH
– ⏭ = SEARCH ▷
– 'A-B' = 'A/B'

The remote control also has the following extra keys:
◁ **INDEX** ▷
– For selecting another index number during play.
– For selecting an index number to start play with.
(◁ from high to low and ▷ from low to high.)

OPEN/CLOSE
› For opening and closing the disc tray.

For the best reception of the signals from the remote control you should aim it as directly as possible at the IR REMOTE eye.

THE INDICATIONS ON THE DISPLAY *(Fig. 6)*
Each Compact Disc has, along with the music, a list detailing the numbers of the tracks, the playing time of each track and the total playing time of the disc. The player always scans this first and stores it in its memory in order, for instance, to provide information via the display.

'_ _ _ _ _'
› Lights up when you switch the player on.
PLAY
› Lights up above **DIRECT** when the player is put in the direct play mode.
PROGR
› Lights up under **DIRECT** when the player is put in the direct programming mode.
'8 ⊂⊃'
› Flashes during the scanning of the disc's track list.
› Lights up when a 8-cm disc is loaded.
'12 ⊂⊃'
› Flashes during the scanning of the disc's track list.
› Lights up when a 12-cm disc is loaded.
REVIEW
› Lights up when you check a programme.
TRACK
Under this indication you will see:
› What track is being played.
› The number of tracks on the disc after it has stopped.
› The number of tracks in a programme.
REPEAT
› Lights up when you repeat a disc or programme.
'A-B'
› Lights up when a passage is repeated.
› **'A'** lights up when the starting point is set.
› **'A-B'** lights up when the stopping point is set.
'▷'
› Lights up during play.
› Flashes when the player is in the pause mode.
TRACK TIME
› Indicates the elapsed playing time of the track being played.
REM TRACK TIME
› Indicates the remaining playing time of the track being played.
TOTAL REM TIME
› Indicates the remaining playing time of a disc or programme.
TOTAL TIME
› Indicates the total playing time of a disc or programme.
ERROR
› Lights up if you make a mistake when operating the player.
EDIT
› Lights up when the player is switched to EDIT mode for the recording time to be entered when you are going to make a tape recording.
RANDOM
› Lights up when the tracks on the disc are played in random order.
'((((O'
› Lights up when the IR REMOTE eye receives a command from the remote control.
DIG OUT ON
› Lights up when the DIGITAL OUT output is switched on.
DIG OUT OFF
› Lights up when the DIGITAL OUT output is switched off.
FTS MEMORY
› Flashes after FTS has been pressed.
› Flashes after loading a disc which has an FTS programme.
› Lights up when a programme from the FTS memory is played.
'1-20' track number indicator
› Shows the number of tracks on the disc after the track list has been scanned.
'+20'
› Lights up when there are more than 20 tracks on a disc.

SWITCHING ON AND OFF (ON/OFF)

Switching on
● Press ON/OFF.
› The display lights up.
When the player is in the automatic play mode (AUTOPLAY) and there is a disc in the tray, a *'P'* appears on the display and a 10-second pause is counted off. Play then starts automatically.

Switching off
● Press ON/OFF again.
› The display is extinguished.

LOADING AND UNLOADING THE DISC
(OPEN or OPEN/CLOSE)

Loading *(Fig. 7-9)*
● Open the disc tray by pressing OPEN or OPEN/CLOSE (on the remote control).
● Insert the disc into the tray ***printed side up.***
● To close the tray:
– Push it lightly or press PLAY/REPLAY if you wish to simply play the disc.
– Press RANDOM if you wish the disc to be played in random order.
– Press OPEN/CLOSE or PAUSE if you wish to start with a particular track or index number.
– Press OPEN/CLOSE if you wish to compile a programme.
If ERROR lights up after the tray has been closed, this means you have loaded the disc upside down or it is dirty, badly scratched or faulty, for example warped. ERROR also lights up if you close an empty tray by hand.

Unloading
● Open the tray by pressing OPEN or OPEN/CLOSE (on the remote control).
● Hold the disc in same way as when loading.
● Store the disc immediately in its holder. This prevents soiling and damage.
● Close an empty tray by pressing OPEN or OPEN/CLOSE.
Avoid leaving the tray open, to prevent dust from entering.

PLAYING THE ENTIRE DISC (PLAY/REPLAY)
● Close the tray by hand or by pressing PLAY/REPLAY.
› The indications '▷' and '8 ⊂⊃' or '12 ⊂⊃' light up and playback starts.
› The number indicator shows how many tracks are on the disc. When a track has been played its number disappears.
› Under TRACK is always shown what track is being played.
› Under TRACK TIME the elapsed playing time of the track being played is always shown.
› After the last track play stops.
› The indication '▷' goes out and the display shows the number of tracks and the playing time of the disc.

CALLING UP OTHER TIME INFORMATION (TIME)
● Press TIME whenever you want to know the remaining playing time of a track.
› REM TRACK TIME lights up.
● Press TIME again if you wish to know the remaining playing time of the entire disc.
› TOTAL REM TIME lights up.
● Press TIME again if you wish to return to the elapsed playing time indication.
› TRACK TIME lights up again.

GOING BACK TO THE BEGINNING OF A TRACK
(PLAY/REPLAY)
● Press PLAY/REPLAY.
› The track starts again from the beginning.

SELECTING ANOTHER TRACK DURING PLAY
('1-0', NEXT or PREVIOUS)

- Put the player in the direct play mode using PROGRAM/PLAY.
  › PLAY lights up above DIRECT.
- Key in the desired number (numbers consisting of two figures must be keyed in ***within 2 seconds***) or press NEXT or PREVIOUS until the number appears under TRACK.
  › The playing time indication disappears.
  › The music stops and a moment later the selected track begins to play.

If you press NEXT while playing the last track, or PREVIOUS while playing the first track, ERROR will light up and play will continue as normal.
This will also happen if you select a non-existent number with the '1-0' digit keys.

SELECTING ANOTHER INDEX NUMBER DURING PLAY (◁ INDEX ▷)

Note!
Index numbers do not have an indication on the display. If the parts of a track have index numbers, this will be specified in the track list in the disc holder.

- Press INDEX ▷ to move on to a later index number.
- Press ◁ INDEX to return to a previous index number.
  › The playing time indication disappears.
  › The music stops and a moment later the selected index number begins to play.

If you press INDEX ▷ while playing the last index number of a track, ERROR will light up and play will start again at the beginning of the track which is being played. This will also happen if you press ◁ INDEX while playing the first index number of a track.

SEARCHING FOR A PARTICULAR PASSAGE DURING PLAY ('⏮ ⏭')

- Hold '⏮' down to search backwards to the beginning.
- Hold '⏭' down to search forwards to the end.

As soon as the key is released play restarts at once. As soon as you reach the beginning of the first track, ERROR lights up. Play will resume there as soon as you release the key. If you reach the end of the last track, ERROR will also light up. If you then release the key, play will resume a few seconds before the end of the disc. At this search speed sound is audible.

FAST SEARCH FOR A PASSAGE (FAST and '⏮ ⏭')

- Press FAST.
  › *'FASt'* lights up.
- Now press '⏮' or '⏭' ***within 2 seconds.***
- Hold the key down; if you release the key briefly, searching will resume at the lowest speed.

At this search speed no sound is audible.

BEGINNING WITH A PARTICULAR TRACK NUMBER

With the digit keys '1-0'

- Close the tray with OPEN/CLOSE (on the remote control).
  › '8 ⏏' or '12 ⏏' lights up and the display shows the number of tracks and the playing time of the disc.
- Put the player in the direct play mode using PROGRAM/PLAY.
  › PLAY lights up above DIRECT.
- Key in the required number.
  › The number appears under TRACK.
  › TRACK begins to flash.
  › The playing time indication disappears.
  › On the number indicator the selected track number and those following it light up.
  › The '▷' indication lights up and play starts from the selected track.

Alternatively, you can close the tray by pressing PAUSE, select the required track number and then press PAUSE again to start play.
If you select a non-existent number, ERROR appears.

With NEXT or PREVIOUS

- Close the tray with OPEN/CLOSE (on the remote control).
  › '8 ⏏' or '12 ⏏' lights up and the display shows the number of tracks and the playing time of the disc.
- Press NEXT or PREVIOUS until the required number appears under TRACK. If you wish to begin with the highest number, you must still press PREVIOUS once.
  › TRACK begins to flash.
  › The playing time indication disappears.
  › On the number indicator the selected track number and those following it light up.
- Press PLAY/REPLAY.
  › The '▷' indication lights up and play starts from the selected track.

Alternatively, you can close the tray by pressing PAUSE, select the required track number and then press PAUSE again to start play.

BEGINNING WITH A PARTICULAR INDEX NUMBER
(◁ INDEX ▷ and PLAY/REPLAY)

Note!
Before selecting an index number you must first select a track number. If you select the track number with the digit keys '1-0', then no more than ***2 seconds*** may elapse between the pressing of the different keys. If you select the track number with NEXT or PREVIOUS, then no more than ***7 seconds*** may elapse between the pressing of the different keys.

- Select the track number you wish to start with.
  › Then press INDEX ▷ or ◁ INDEX until the desired index number appears on the display.
  › The playing time indication disappears.
- Press PLAY/REPLAY.
  › The '▷' indication lights up and play starts from the selected index number.

Alternatively, you can close the tray by pressing PAUSE, select the required track and index number and then press PAUSE again to start play.
If you select a non-existent index number, ERROR lights up and playback starts with the selected track.

PLAYING THE DISC IN RANDOM ORDER (RANDOM)
- Before or during play press RANDOM.
› The RANDOM indication lights up.
› If the tray was open, it will now close.
› A *'P'* appears on the display. After this a 5 second pause is counted down. This is repeated each time before a new track is played.
› All the tracks on the disc are now played in a sequence to be determined by the player.
› Press RANDOM again if you wish to return to normal play.

If during play you press PREVIOUS you will return to a track which has already been played. If you press NEXT you are selecting any one of the following tracks.
By pressing REPEAT you can repeat random order play. The player then always begins with the same track, but otherwise changes the sequence every time the disc is repeated.

BRIEFLY INTERRUPTING PLAYBACK/HOLDING PLAY AT THE START OF A DISC, TRACK OR PASSAGE (PAUSE)

To briefly interrupt playback
- Press PAUSE.
› The '▷' indication starts flashing.
› The sound stops but the disc continues to spin.
- Press PAUSE again to restart.
› The '▷' indication now remains lit.
› Play restarts at the point where it was interrupted.

Holding play at the start of a disc, track or passage
You can go to any place on the disc and hold it by pressing PAUSE before:
– starting to play the disc;
– going back to the beginning of a track;
– selecting another track or index number ;
– searching for a particular passage;
– beginning with a particular track or index number;
– playing the disc in random order.

Press PAUSE again to start play at the chosen place.

REPEATING A PASSAGE ('A-B')
- During play press 'A-B' at the required starting point.
› The 'A' indication lights up.
- Press 'A-B' again at the required stopping point.
› The 'A-B' indication lights up.
› The passage between points A and B will now be replayed continuously.
- Press 'A-B' again to stop repeat.
› The 'A-B' indication goes out and play continues as normal.

To find the starting and stopping points quickly, you can use the '◁◁ ▷▷' keys.
The repeating of a passage can also be stopped by pressing STOP/CM, OPEN or OPEN/CLOSE.

REPEATING THE DISC (REPEAT)
- Press REPEAT before or during playback.
› The REPEAT indication lights up.
- Press REPEAT again to stop repeating.
› The REPEAT indication goes out.
› The disc will play on to the end and then stop.

Repeating can also be stopped by pressing STOP/CM, OPEN or OPEN/CLOSE.

STOPPING PLAYBACK
(STOP/CM, OPEN or OPEN/CLOSE)
- Press STOP/CM if you merely wish to stop.
› The '▷' indication goes out.
› The display shows the number of tracks and the total playing time of the disc.
- Press OPEN or OPEN/CLOSE if you wish to stop and take out the disc.
› The indications '▷' and '8 ⬭' or '12 ⬭' go out and '– – – –' lights up.

PROGRAMMING

By programming the player you can play up to 20 tracks of a disc in any required sequence. If you exceed the maximum of 20 tracks, ERROR lights up. Index numbers cannot be stored.

STORING A PROGRAMME

Before play
- Close the tray by pressing OPEN/CLOSE (on the remote control).
› The indication '8 ⬭' or '12 ⬭' lights up and the display shows the number of tracks and the playing time of the disc.
- Press PROGRAM/PLAY.
› PROGR lights up under DIRECT; the player is now in the direct programming mode. Every track number you now key in is directly included in the programme.
- Key in the first number you wish to programme.
› TRACK begins to flash.
› The number appears on the number indicator.
› The number has now been stored.
- Store each of the remaining track numbers required in the same way.
› Every time you store a track number, you will see the number of tracks under TRACK and the playing time of your programme under TOTAL TIME. The number indicator always shows what numbers have been stored.

During play
- Put the player in the direct programming mode using PROGRAM/PLAY.
› PROGR lights up under DIRECT.
› Every track number which you now key in is directly included in the programme.
› The number indicator always shows what numbers have been stored.

CHECKING THE PROGRAMME
- Press REVIEW if you wish to see the sequence in which you have stored the track numbers.
› The REVIEW indication lights up.
› All the numbers appear in the programmed sequence under TRACK.

If ERROR lights up, this means that no track numbers have yet been stored.
You can check a programme prior to, during or after programmed play.

ERASING A TRACK NUMBER FROM THE PROGRAMME OR THE ENTIRE PROGRAMME
- Press REVIEW.
› The REVIEW indication lights up.
› All the numbers appear in the programmed sequence under TRACK.
- Press CLEAR as soon as the number you wish to erase appears.
› The number disappears from the number indicator.
- Press STOP/CM if you wish to erase the entire programme.
› The display shows the number of tracks and the total playing time of the disc.

PLAYING THE PROGRAMME
- Press PLAY/REPLAY.
› '▷' lights up and playback starts with the first number of the programme.

All keys can be used during programmed play. Searching for a particular passage is limited to within the track being played. When either end of the track is reached ERROR lights up. When STOP/CM is pressed or when the programme has been played, the disc stops, but the programme remains stored. The programme will be erased when you open the tray or if you press STOP/CM twice in succession ***during playback***. Once play has started you can no longer change the programme.

FAVOURITE TRACK SELECTIONS (FTS)

You can also transfer a programme to the permanent (FTS) memory of the player. Your favourite track selection of a given disc can then be called up and played whenever you wish.
The selection will remain stored in the FTS memory even if you play the entire disc or compile a different programme from it.
Each disc in the FTS memory is given a ranking number which is shown on the display.
The number of discs which can be stored in the FTS memory depends on the number of tracks in each programme.

Note!
FTS must always be used together with other keys. Press the next key ***within 5 seconds***, otherwise the FTS MEMORY indication will stop flashing. You can then start again by pressing FTS once more.

STORING A FAVOURITE TRACK SELECTION
- Compile your programme as described in the PROGRAMMING section.
- Press FTS.
› FTS MEMORY starts flashing.
- Press STORE.
› The display shows the ranking number of this programme.
› Your favourite selection is now stored in the FTS memory under this ranking number.

If a selection of a particular disc had already been stored, then it is automatically erased and the new selection is stored under the old ranking number.
If ERROR appears after you have pressed STORE, it can be for one of the following reasons:
– The FTS memory is full: you must erase one or more old FTS programmes to make room to store the new programme.
– No programme has been compiled first.

FTS PROGRAMMED PLAY
- Press FTS.
› FTS MEMORY starts flashing.
- Press PLAY/REPLAY.
› FTS MEMORY now lights up continuously and '▷' lights up.
› Your favourite selection for this disc will now be played.
If ERROR appears, no favourite selection has been stored.
- Press STOP/CM twice if you wish to revert to normal play.

All keys can be used while a favourite selection is being played.
Search for a passage is only possible in the track which is being played. When either end of the track is reached ERROR lights up.

ERASING A FAVOURITE TRACK SELECTION
- Press FTS.
› FTS MEMORY starts flashing.
- Press NEXT or PREVIOUS until the ranking number appears on the display.
- Hold CLEAR pressed down.
› *'CLr'* appears on the display, followed a few moments later by '– – –'.
› The display again shows the number of tracks and the playing time of the disc; the selection has now been erased from the memory.

If you do not know the ranking number:
- Press FTS.
› FTS MEMORY starts flashing.
- Press REVIEW.
› The ranking number appears on the display.
- Hold CLEAR pressed down.
› *'CLr'* appears on the display, followed a few moments later by '– – –'.
› The display again shows the number of tracks and the playing time of the disc; the selection has now been erased from the memory.

ERASING THE ENTIRE FTS MEMORY
- Press FTS.
› FTS MEMORY starts flashing.
- Press REVIEW, NEXT or PREVIOUS.
› A ranking number appears on the display.
- Hold REPEAT and CANCEL pressed down.
› *'ALL'* appears on the display, followed a few moments later by '– – –'.
› The display again shows the number of tracks and the playing time of the disc; the entire FTS memory has now been erased.

OTHER POSSIBILITIES

LISTENING WITH HEADPHONES (PHONES)
Connect headphones with a 6.3 mm jack plug and an impedance between 8 and 2000 ohms to the PHONES socket.
The sound level you hear is dependent on the impedance of the headphones and the signal level on the disc itself.

RECORDING FROM YOUR COMPACT DISC PLAYER
If you wish to make a tape recording of a disc or a programme, it can be useful to store the recording time of the tape in the player's memory.
Should the disc or the programme be longer than one side of the tape, a pause will then be inserted automatically after the last track which fits onto that side. This will prevent the disc or the programme continuing to play when the tape has already stopped.

- Press EDIT.
› EDIT lights up and TIME starts flashing.
- Key in the ***total*** recording time of the tape using the '1-0' digit keys.
- Press STORE.
› The recording time is now stored in the player's memory; you can now record the disc or first compile a programme from the disc.
- Press PLAY/REPLAY to play the disc or the programme.
› The track number indicator shows which tracks can be recorded on side A of the tape; these numbers will be played one after the other.
› Play will stop after the last track.
- '▷' starts flashing.
› The track number indicator shows which tracks can be recorded on side B of the tape.
- Press PAUSE to continue play.

Note!
– You can also start playback with RANDOM; the numbers will then be recorded in a different order than on the disc or in the programme.
– As soon as you press PLAY/REPLAY or RANDOM, the other player functions (except TIME) will temporarily be switched off to prevent the recording being interfered with.
– Should the disc or the programme be longer than the ***total*** recording time of the tape, a pause will then again be inserted after the last track which fits onto side B. The track number indicator shows the remaining, unrecorded tracks.

ADDITIONAL INFORMATION

CARE OF THE DISCS

Although both sides of a disc are protected by a special coating, it is still advisable to treat the discs with care:

- Never leave discs lying around, put them back in their holders immediately after use.
- Never write on the printed side!
- Do not attach any stickers on the disc.
- Keep the shiny surface of the disc clean. Use a soft lint-free cloth and always wipe the disc in a straight line from centre to edge. You may breath lightly on the disc first.

The cleaning set SBC 3540, available separately, is a useful accessory for cleaning your discs. It contains a protective support, a special disc cleaning cloth and a bottle of cleaning fluid.

Note!
Cleaning agents for conventional records are not suitable for cleaning a Compact Disc. Nor may detergents or abrasive cleaning agents be used.

PLAYER MAINTENANCE

A chamois leather slightly moistened with water is sufficient for cleaning the player. Do not use cleaning agents containing alcohol, spirits, ammonia or abrasives.
The disc tray should be kept free of dust with a dry cloth.

TECHNICAL DATA

Typical Audio Performance
Frequency range: 2-20,000 Hz
Amplitude linearity: ±0.02 dB (20-20,000 Hz)
Phase linearity: ±0.5° (20-20,000 Hz)
Dynamic range: >96 dB (20-20,000 Hz)
Signal-to-noise ratio: >105 dB (20-20,000 Hz)
Channel separation: 105 dB (1 kHz)
Total harmonic distortion: 0.0025% (1 kHz)
Wow and flutter: quartz crystal precision
D/A conversion: quadruple oversampling (176.4 kHz) with digital filter and two 16-bit D/A-converters
Audio output level: 2 V_{rms}
Impedance PHONES socket: 8-1000 ohms

Power supply
Mains voltage and frequency: see the type plate on the rear of the player
Power consumption: 25 W approx.
Safety requirements: IEC 65

Cabinet
Material/finish: metal and polystyrene with decorative trim
Dimensions (w × h × d): 420 × 90 × 280 mm
Weight: 4 kg approx.

Subject to modification

This Compact Disc player complies with radio interference requirements as laid down in EC regulations.

FAULTS AND THEIR LIKELY CAUSES

Insufficient familiarity with the combination of a new product and new discs may lead to faults arising during use. These are generally caused by simple errors in operation or external factors. It is perhaps useful to check the points listed below and where possible remedy these before taking your player for repair.

- The transit clamps have not been removed.
- Condensation has formed on the lens of the laser due to a dramatic change in temperature. This will disappear automatically after some time.
- There is a foreign object in the disc tray.
- The disc has not been inserted with the printed side up or there is no disc in the tray.
- The disc is dirty, badly scratched or warped.
- The player has been connected to the PHONO socket of the amplifier.

If the fault remains, try to clear it by switching the player off and on. If this also fails to help, do not continue experimenting, but remove the plug from the socket and consult your dealer.
Certain faults may be caused by a disc. In order to help determine the precise cause, take the disc with which the fault occurred with you when you take the player for repair.
Under no circumstances should you repair the player yourself, as this will invalidate the guarantee!